PHD SYNOPSIS

Exploring Self-reliance in Primary Healthcare Among Families and Communities Using Traditional Medicine in Karnataka and Kerala

Name of the Candidate

Mr. Shivanand B Savatagi

Registration Number: 20518010222

Under the Guidance of

Dr. Prashanth N S (Guide)
Institute of Public Health Bengaluru &
Dr. Unnikrishnan Payyappallimana (Co-guide)
The University of Transdisciplinary Health Sciences and Technology, Bengaluru

Title: Exploring Self-reliance in Primary Healthcare among Families and Communities Using Traditional Medicine in Karnataka and Kerala

Summary

The synopsis gives an overview of all the chapters of the thesis. The introduction chapter discusses self-care, self-reliance, self-efficacy and the gaps in their conceptualization and application. By the end of the first chapter, the reader contextualizes oneself the need for studying self-reliance in relation to TM and primary healthcare. The scoping review, the second chapter of the thesis, provides a theoretical conceptualization of self-reliance through a framework that locates different factors influencing the emergence of self-reliance. The scoping review identified the gap in empirical research on self-reliance. Chapter three explains the case study method that was used to conduct research in HD Kote and Aluva (two sites where case studies were carried out) on self-reliance in primary healthcare using TM. The subsequent chapter is on the findings of case studies conducted in HD Kote and Aluva. The key findings of the studies are highlighted in relation to people's understanding of health and disease and their healthcare approaches in response to disease of illness to draw an explanation of self-reliance. A conceptual framework derived from the scoping review was relooked and refined based on the findings of both case studies. The later section of the results explains the participatory research and further refinement of the framework based on participatory research findings. The discussion chapter provides reflections on the results obtained from the study by comparing them with other studies. The discussion chapter also highlights the strengths and limitations of the study. The synopsis ends with concluding research findings.

1. Introduction

The World Health Organization (WHO) defined self-care as “the ability of individuals, families, and communities to promote and maintain health, prevent disease, and to cope with illness and disability with or without the support of a healthcare provider (1).” The morbidity and mortality pattern from such diseases is preventable and modifiable through changing lifestyles, and dietary habits, and increasing the health literacy of individuals (2). Such practices in health literature are called by different terminologies that include self-care, self-reliance, self-efficacy, and self-management.

In India, the use of TM has a long history and embedded within every culture of the community. Even today, more than 70% of people depend on TM to treat common ailments (3). TM includes both codified and non-codified systems (4). The codified system has acquired legitimacy and formal recognition of the practice (e.g., Ayurveda, Yoga, Unani, Siddha, and Homeopathy (AYUSH)); the non-codified or folk medicine includes bone setters, birth attendants, local healers and the use of home remedies by elders or mothers in the family to address minor health ailments (5). In folk medicine, knowledge is transmitted orally through generations and includes household knowledge for primary healthcare, use of food recipes, customs, and rituals. The practice of TM is in the lifestyles of many rural communities in India (6) and represents generations of empirically grounded knowledge validated through shared experiences across the ages (7). Intergenerational knowledge of TM among families is a vital source of self-care practice that eventually could enable self-reliance in healthcare (8).

The Alma-Ata Declaration 1978 emphasizes primary healthcare that is accessible, affordable and cost-effective for the community (9). A strong emphasis on primary healthcare and self-reliance is imperative to achieve Universal Health Coverage (UHC) and sustainable development goals pertaining to health (10). During the 1970s and 1980s, self-reliance gained an attention as a theme of discussion in health debates (11). The emergence of self-reliance projects during 1990s in response to structural adjustment program was an indicator of growing importance in self-reliance. The emphasis on self-reliance continues to grow even in the 21st century with the aim of empowering people and communities to meet society's rapidly changing demands, needs, and expectations in relation to healthcare (12). Self-reliance with its philosophy of empowering

people and communities aims to create an ecosystem where people and communities share the ownership of achieving healthcare they need while being dependent on the health system.

Self-care, self-reliance, self-efficacy, and self-management are receiving the attention of policymakers more than ever. These approaches emphasize enhancing the use of local resources and the individual's responsibility towards health (13). However, these terms have been used interchangeably in the health literature, reflecting their similarities and differences. In this study, self-reliance is used as the central theme due to its close relation with primary healthcare and TM. The study aims to synthesize the conceptualization of self-reliance through reviewing literature, using a case study and participatory research methods by developing a self-reliance framework that can be applied in health interventions. Self-reliance relates to the health behavior of an individual. One of the predominant behavioural change theories is self-determination theory. The elements of the self-determination theory (SDT) used to understand the complex nature of self-reliance that helps in delineating various factors involved in the manifestation of self-reliance. Therefore, the elements of SDT were used as a guiding tool to analyze study results.

2. Factors influencing the emergence of self-reliance in primary healthcare using traditional medicine: A scoping review

The second chapter of the thesis is the scoping review. Given the complexity of studying how self-reliance emerges arises a need to understand the influence of various factors. The scoping review aimed to synthesize the factors determining the emergence of self-reliance in primary healthcare using TM in resource-poor settings, focusing specifically on Low- and Middle-Income Countries (LMIC). The screening process led to retention of 29 papers for review and analysis. The review provided a conceptual framework that located the factors influencing self-reliance at different levels. (12). The conceptual framework was developed (figure 3 of the thesis) based on the obtained themes. Self-reliance manifests at the individual level and it is the result of interaction between factors from the macro (policy and environment) to the micro context (community and household). The substantial gap between understanding self-reliance and its application in the health policy and practice is due to the lack of explanatory models of self-reliance. The scoping review identified the need for conducting empirical research to

comprehend self-reliance from the lived experiences of people and connect to the realities with its theoretical understanding.

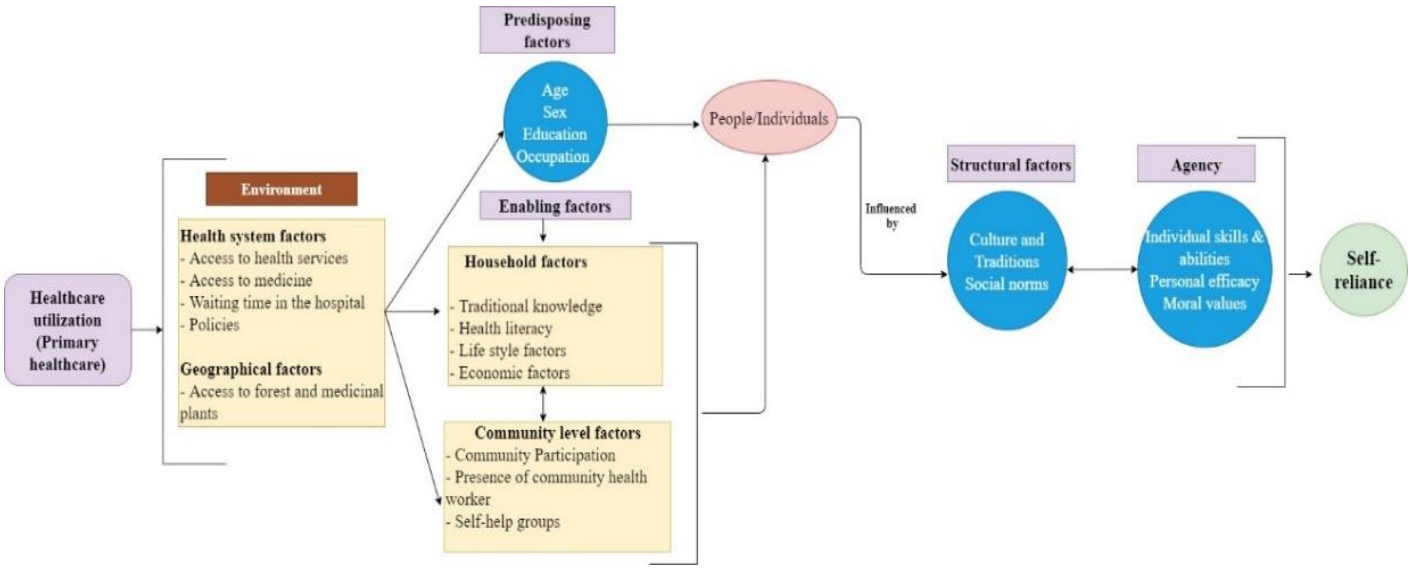

Figure 3 of the thesis: A self-reliance conceptual framework.

3. Case study research

This is the third chapter of the thesis. One of the recommendations the scoping review identified was the need for conducting empirical research that could help to enhance the understanding of self-reliance. The case study research was conducted in HD Kote, Karnataka State and Aluva, Kerala State. The objective of the case study research was to explore self-reliance among households (families) and communities using TM, and co-develop a self-reliance framework to assess its application in a community health intervention utilizing TM.

The present study considered two levels of interventions (household and community levels) to examine self-reliance. These two study sites were identified through the University of Transdisciplinary Health Sciences and Technology (TDU), Bengaluru (14) where TM interventions were carried out at two different sites: 1) Household level in H D Kote, Mysore (practice of TM at household level for human healthcare), and 2) Community level in Aluva, Ernakulam (practice of TM at community level for animal healthcare). Following ethical

guidelines, the data was collected using qualitative data collection methods with in-depth interviews, focus group discussions, and observations.

4. Study findings

The fourth chapter of the thesis presents findings of both HD Kote and Aluva case study research. Here is the snapshot of the main findings:

4.1. HD Kote case study

HD Kote case study results describe the perception of health and disease, causes of disease as perceived by the participants, healthcare pathways adopted by the study participants, healthcare facilities available in the study area, common disease conditions and their treatment using TM, challenges in choosing a healthcare approach, influence of sociodemographic factors on the use of TM, and cultural, ritual, spiritual, and value-based practices for prevention of illness and promotion of health. The chapter closes with a description of the emergence of a healer in the community in response to a health problem. Here, the understanding of self-reliance navigated within the explanation of health and illness and the ability to manage health by the study participants.

The definition of health by the study participants varied from the absence of a disease to being happy and satisfied. Their explanation of health related to environmental factors, food habits, and lifestyles. Changing lifestyles, seasons, changes in the place, environmental factors, and habits associated with health were enumerated as causes for a disease. In response to a disease or illness, there existed the complexity of healthcare approaches in the study area. The study identified seven pathways of care that were being practiced by the study participants in HD Kote. Seven pathways are illustrated clearly in the diagram that follows (Figure 11):

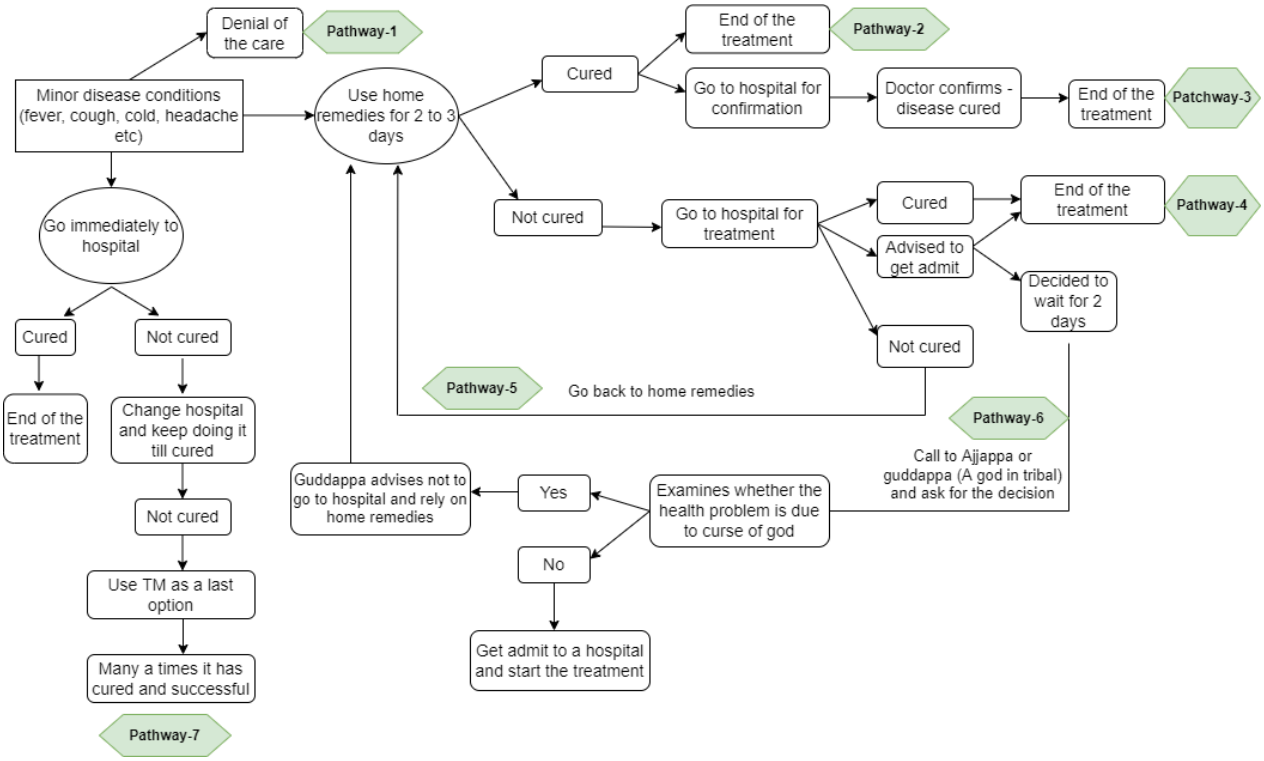
Denial of the care
Pathway-1
Minor disease conditions (fever, cough, cold, headache etc)
Use home remedies for 2 to 3 days
Cured
End of the treatment
Pathway-2
Go to hospital for confirmation
Doctor confirms - disease cured
End of the treatment
Patchway-3
Not cured
Go to hospital for treatment
Cured
End of the treatment
Pathway-4
Advised to get admit
Decided to wait for 2 days
Not cured
Go immediately to hospital
Cured
Not cured
End of the treatment
Change hospital and keep doing it till cured
Not cured
Use TM as a last option
Many a times it has cured and successful
Pathway-7
Pathway-5
Go back to home remedies
Pathway-6
Call to Ajjappa or guddappa (A god in tribal) and ask for the decision
Examines whether the health problem is due to curse of god
Yes
Guddappa advises not to go to hospital and rely on home remedies
No
Get admit to a hospital and start the treatment

Figure 11 of the thesis: Healthcare pathways identified in the HD Kote

The study revealed various reasons for their choice of the healthcare practice. The choice was driven by both push factors (health system challenges of accessibility, affordability, and availability) and pull factors (cultural and religion relevance, spiritual component, and customs).

The quest for seeking solutions to health problems in the community persists through the trial-and-error approach by using their own resources. This was observed by witnessing an emergence of the healer in the community who attempted multiple options before finding out a solution. The identified solution was even used to other people in the community to address similar health problems.

4.2. Aluva case study

This case study was at the community level. The study participants consisted of farmers, veterinarians, and village resource persons to capture community-level perspectives on the use of TM that enables self-reliance.

Similar to the HD Kote case study, the Aluva case study results have also been organized. The definition of health ranged from the mere absence of disease to a broader connection with lifestyle, culture, state of the body, and spiritual practices. Study participants expressed the changes in climate and food, use of chemicals, and unhygienic practices as causes of diseases. The inherent strength of Kerala lies in its TM which includes both codified (Ayurveda, Homeopathy, Unani, and Siddha) and non-codified systems (healers, bone setters, and poison treatment practitioners). A few study participants were consistent with their practice in Aluva unlike in HD Kote which had more of a trial-and-error approach. The response to the disease conditions by the study participants was based on the three modalities of treatment – Ayurveda, Homeopathy and Allopathy or modern medicine. Study participants prioritized TM and allopathy medicine equally. The healthcare approaches practiced by the study participants are given in the diagram that follows (Figure 15).

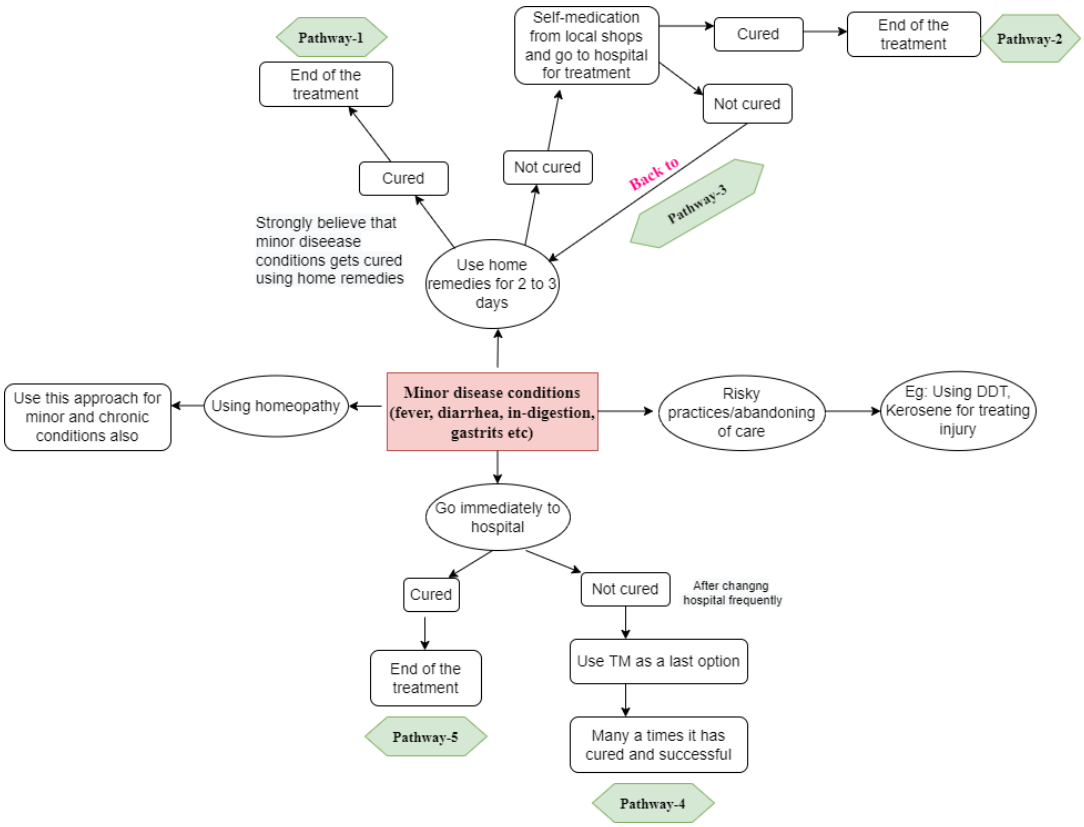
Pathway-1
End of the treatment
Self-medication from local shops and go to hospital for treatment
Cured
End of the treatment
Pathway-2
Not cured
Cured
Not cured
Back to
Pathway-3
Strongly believe that minor diseease conditions gets cured using home remedies
Use home remedies for 2 to 3 days
Use this approach for minor and chronic conditions also
Using homeopathy
Minor disease conditions (fever, diarrhea, in-digestion, gastrits etc)
Risky practices/abandoning of care
Eg: Using DDT, Kerosene for treating injury
Go immediately to hospital
Cured
Not cured
After changng hospital frequently
End of the treatment
Use TM as a last option
Pathway-5
Many a times it has cured and successful
Pathway-4

Figure 15 of the thesis: Healthcare pathways identified in Aluva

Among the study participants, knowledge and practice of TM were evident in all the age groups. With regards to gender, although TM was evident in both men and women, three women participants expressed that as homemakers, the responsibility of using TM comes to them by default since they stay at home. Lack of availability of veterinarians, increased expenses, and decreased milk production among cattle due to overuse of modern medicine were major challenges highlighted in the interviews**.** Veterinarians mentioned that lack of knowledge among farmers is the main reason for the delayed treatment. Similar to HD Kote, push and pull factors played a significant role in choosing a healthcare approach. Veterinarians used TM as complementary to their treatment. Occasionally, TM helped to treat a specific disease condition based on an earlier positive experience by the veterinarian. Veterinarians also highlighted the challenges they faced in accepting TM as part of their practice: the lack of research and evidence on TM and the non-standard practices of TM. A channel that was created at the community level in the form of Village Resource Person (VRP) played a significant role in facilitating TM for treating animal health conditions. However, to sustain such a channel, there has to be support at every level. The creation of any cadre should be provided with an enabling environment within the socio-political context for smooth functioning.

5. Derivation of self-reliance framework from HD Kote and Aluva case study

Both the case studies critically looked at the different factors that emerged from the field data and compared them with the conceptual framework of self-reliance (derived from scoping review) to refine it (Figure 17).

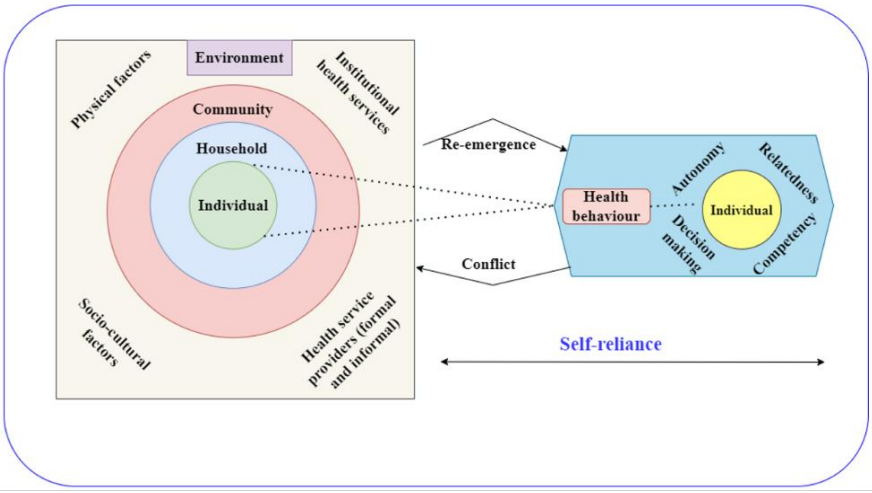

Figure 17 of thesis: A self-reliance framework derived from Case study findings

The framework has two components; the environment, and the individual. The negotiation process between different factors exists within the environment and the individual. Challenges associated with the health care delivery system (accessibility, availability, and affordability) were considered as physical factors, the health system factors refer to the availability of institutional health services (public, private, dispensaries, NGOs, and clinics) and healthcare providers (doctors, nurses, healers, and community health workers). The environmental component of the framework also talks about socio-cultural factors that a community, household, and individual believe in.

The right side of the framework focuses on the individual. The framework describes an individual as not only a part of the environment in which he/she lives but also a part of one's individualistic nature. The level of competency, the ability to make decisions, the ability to relate to the environment and the autonomous nature of an individual influence one's health behaviour. The conflict and re-emergence words in the framework denote an individual's struggle to sustain their health behaviour due to interaction between the environmental and individual factors. For an individual to be self-reliant, he/she must acquire skills of resource utilization, informed decisions, and problem-solving (15). Based on the factors identified in the framework, the self-reliance definition is "**the ability of an individual to make informed health decisions through the use of local resources (formal and informal health services, and medicinal plants) by aligning social and cultural beliefs of an individual to achieve sustainable health behavior that is flexible and adaptable to a particular context**."

5.1. Participatory research

The co-development of self-reliance framework through participatory research was the third step in developing the self-reliance framework. The purpose was to refine the framework from an implementation perspective. The self-reliance framework derived as a result of scoping review and case study research was introduced to stakeholders who were part of the TM interventions to seek inputs and feedback. Based on the findings of participatory research findings, the definition of self-reliance was revisited. Research participants added new attributes of independency, competency, and responsible behaviour while defining self-reliance. Hence, the revised self-reliance definition is:

"**The ability of an individual to make informed health decisions to use local resources (formal and informal health services, and medicinal plants) considering social and cultural beliefs to achieve sustainable health behavior through which an individual achieves a state of autonomy, competent, and responsible towards his/her health that gives a sense of empowerment to an individual. Such a state of health behavior that is flexible and adaptable to a particular context is termed [as] self-reliance**."

The self-reliance framework was further refined by comparing it with the factors that emerged in the participatory research. The participation of different stakeholders in the participatory research identified the need for intersectoral coordination to deal with environmental factors. Therefore, a refined framework included the socio-political context as a new element that covered both environmental and individual components of the framework. In addition to this, conflict and re-emergence components were further explored to capture their role in the manifestation of self-reliance.

The final self-reliance framework that emerged after comparing participatory research findings with case study findings is as given in: (Figure 19)

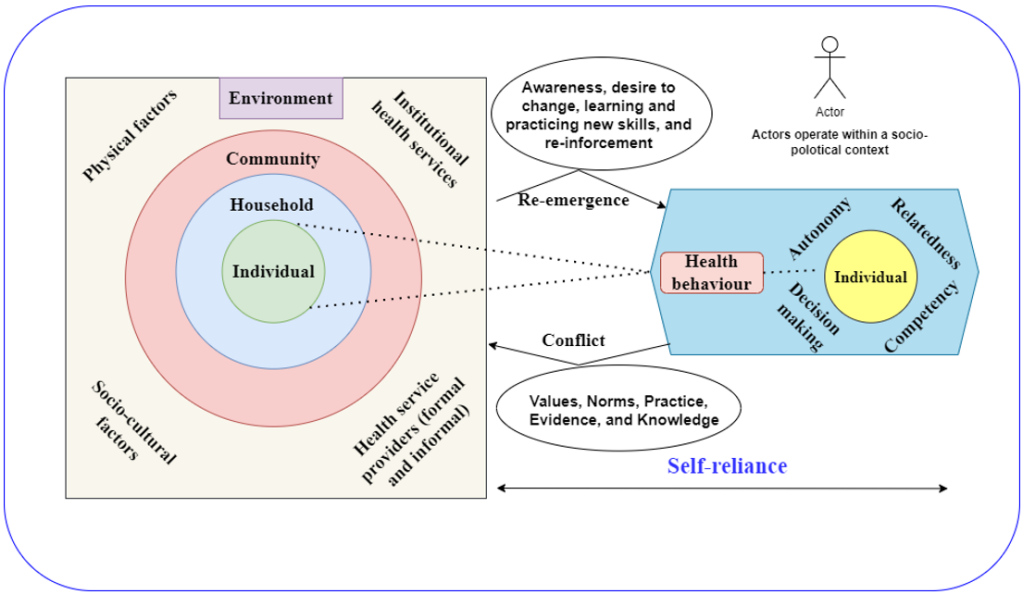

Figure 19 of the thesis: A modified self-reliance framework

6. Discussion

In the fifth chapter the discussion is around the implications of self-reliance study findings in relation to primary healthcare, health policies, and the health system as a whole. The findings from the previous studies have been compared to support, reflect, or negate the present study findings.

6.1. Multidimensional understanding of health by the study participants

The present study identified that the health behaviour of an individual is shaped by meeting everyday needs such as bodily, economic, emotional and therapeutic needs, and social relations. This coincides with the findings by Debra and Jennifer who spoke about the importance of social relations, religious, and cultural factors in maintaining one's health (16). For healthcare providers, a multidimensional understanding of health allows for a comprehensive assessment of an individual's well-being or health problem.

6.2. Complexity of healthcare approaches and need for self-reliance

Healthcare decisions were the result of push and pull factors. Participants expressed helplessness and hopelessness if their decision was due to push factors. However, a positive feeling and confidence were expressed if the decision was taken based on pull factors. Specific to TM use, apart from their easy availability and accessibility, the synchronization of one's values and beliefs with the TM approach was the primary reason for adopting TM practices. It was efficiency (ability to achieve desired health outcomes) that bothered the participants the most rather than authenticity (proof or evidence backed by science). This study identified the challenges of availability, accessibility, increased waiting hours, and affordability. They align with Braddock et al.'s observation that a physician spends less than a minute with patients due to the long queues in a hospital, resulting in inadequate information provided to the patients about their disease condition (17). Braddock et al. emphasized the importance of being available in the context where people feel more comfortable for the better exchange of health communication between healthcare providers and patients to understand health problems in a better way (17).

The Aluva case study revealed, the use of different modalities of treatment among healthcare providers. As stated by one veterinarian, 40% of medicines in the veterinary hospital in Aluva are Ayurvedic. This indicates the already existing pluralistic health system in a community both

among people and healthcare providers. Thus, the need to respect different forms of knowledge is imperative to take advantage of the strengths of different modalities of treatments for the better health and well-being of the people (18).

6.3. Analysis of case studies to delineate factors influencing the emergence of self-reliance

The meaning of self-reliance was embedded within the worldviews of the study participants in relation to health. The conceptualization of self-reliance was a result of the co-production of knowledge that was derived from the literature and understanding of the lived experiences of people (19,20). HD Kote and Aluva's case studies focused on the household and community levels. Both the levels consisted of overlapping factors of different levels (household and community) in the emergence of self-reliance. Going beyond community and household factors, the understanding of illness or disease was largely driven by the culture, traditions, and social norms (21,22). The factors that were identified in both case studies correlate with the components of the self-determination theory that focus on achieving sustainable behaviourial change by considering individual and environmental factors (23). To apply the theoretical understanding and philosophical nature of different factors in the emergence of self-reliance, there is a need to create local champions (for instance local healers, community health workers, health facilitator, or village resource persons) who understand community culture, traditions, customs, and beliefs while understanding, adopting, practising, and promoting healthcare practices in a particular community. This approach could be a positive direction to enable the self-reliance of individuals and communities in primary healthcare.

6.4. Self-reliance as a strategy to strengthen the health system

The multidimensional understanding of health by study participants revealed that health is viewed in a larger domain of well-being and calls for a newer perspective to bring solutions to strengthen the health system. The majority of the health decisions were driven by their cultural beliefs, traditions, religious, and spiritual beliefs. Thus, practice and beliefs are inseparable since they contribute to each other. Kabir Sheikh and Lucy Gilson call these beliefs of healthcare practice as software elements of the health system. They argue that it is imperative to balance software elements (culture, relationships, values, and norms) and hardware elements (human resources, medicine and technology, finance, and information systems) while operating in

complex socio-political contexts to strengthen the health system (24). Respecting different worldviews to enhance capacities of people is the way forward to strengthen the health system. Self-reliance is a valuable approach towards the same.

6.5. Policy implications of self-reliance

Health systems continue to face issues of accessibility, affordability, equity, and meeting the expectations of people for whom health services are targeted. Comprehending principles of self-reliance could help to design health interventions and policies that are people-centric and empower people to become self-reliant in primary healthcare. The emerging concepts of One health, Health in All Policies, Planetary health, and Eco health that emphasize inter-sectoral approach to health should also focus on the self-empowerment of people with focused methodologies cutting across disciplines. Self-reliance if enabled with appropriate strategy could contribute to universal health coverage.

Ayushman Bharat health and wellness program in India emphasizes self-care, informed decisions, respectful care, people-centred care, and confidentiality in its policy guidelines (25). The present study re-emphasizes those principles to enable the self-reliance of individuals and communities. The AYUSH health and wellness program also emphasizes moral behaviour (s*advrita*) for the well-being of people which aligns with the findings of this study where *dharma* (Religion), *Nyaya* (Justice), and *neeti* (Moral conduct) were part of self-care. Integrating TM in the existing health programs, for instance Rashtriya Bal Swasthya Karyakram could help in creating an eco-system of knowledge exchange to enhance self-care practice using TM for enabling self-reliance of families and communities.

6.6. Strengths and limitations of the study

The self-reliance framework is the strength of this study. There was no such framework that explained the phenomena of self-reliance in the previous studies. This study contributed to such a gap by providing a comprehensive framework that located different factors influencing the manifestation of self-reliance. A qualitative study using a case study approach allowed people to reflect on their practices and beliefs that allowed study participants to provide an in-depth explanation of their lived experience of using TM and other modalities of treatment. The study

covered rural, semi-urban, and tribal contexts to conceptualize self-reliance that provided diversity in understanding the factors. The influence of gender, caste, and religion has been superficially covered while conceptualizing self-reliance which is a limitation. The concept of self-reliance is widely used in different disciplines including chronic health conditions, while the current research was limited to TM and primary healthcare.

7. Conclusion

The present study provided an understanding of self-reliance within the health system from the people's perspectives and their lived experiences. Self-reliance cannot be understood as self alone; one must meaningfully understand it in relation to the environment and socio-political context. While investigating a concept like self-reliance, the local community's values, worldviews, and lived experiences should be taken into consideration to delineate the complexity of healthcare decisions. Although integrative approaches come with a choice component, the choice should happen strategically and logically, rather than arbitrarily. The TM interventions that aim to enable the self-reliance of the individual and communities should incorporate methods to identify indicators of self-reliance in their interventions that in turn help in measuring and evaluating the intervention that helps in creating evidence and designing specific policy guidelines.

8. References

1. WHO self-care in health [Internet]. [cited 2022 Dec 6]. Available from: https://apps.who.int/iris/bitstream/handle/10665/205887/B5084.pdf?sequence=1&isAllowed=y

2. Conner M, Norman P, editors. Predicting health behaviour: research and practice with social cognition models. 2. ed., repr. Maidenhead: Open Univ. Press; 2007. 385 p.

3. Payyappallimana U. Role of Traditional Medicine in Primary Health Care: 14(6):22.

4. Oyebode O, Kandala NB, Chilton PJ, Lilford RJ. Use of traditional medicine in middle-income countries: a WHO-SAGE study. Health Policy Plan. 2016 Oct;31(8):984–91.

5. Adhikari P, Paul S. HISTORY OF INDIAN TRADITIONAL MEDICINE: A MEDICAL INHERITANCE. Asian Journal of Pharmaceutical and Clinical Research. 2018 Jan 1; 11:421.

6. Reviving local health knowledge for self-reliance in primary healthcare. https://www.researchgate.net/publication/331231120_Reviving_local_health_knowledge_for self_reliance_in_primary_health_care. Accessed on 18th September 2020.

7. Dahlberg AC, Trygger SB. Indigenous Medicine and Primary Health Care: The Importance of Lay Knowledge and Use of Medicinal Plants in Rural South Africa. Human Ecology. 2009;37(1):79–94.

8. Mathpati MM, Payyappallimana U, Shankar D, Porter JDH. 'Population self-reliance in health' and COVID-19: The need for a 4th tier in the health system. Journal of Ayurveda and Integrative Medicine [Internet]. 2020 Sep 21 [cited 2021 Apr 7]; Available from: https://www.sciencedirect.com/science/article/pii/S0975947620300863

9. Baum F. Health for All Now! Reviving the spirit of Alma Ata in the twenty- first century: An Introduction to the Alma Ata Declaration. 2007;2(1):8.

10. World Health organization and unicef. Vision for primary health care in 21st century [Internet]. [cited 2019 Jul 17]. Available from: https://www.who.int/docs/default-source/primary-health/vision.

11. Levin LS, Idler EL. Self-Care in Health. Annual Review of Public Health. 1983;4(1):181–201.

12. WHO - Regional Report 2009. Self-care in the context of primary health care [Internet]. WHO; [cited 2019 Aug 13]. Available from: http://apps.searo.who.int/PDS_DOCS/B4301.

13. Bayer and white ribbon alliance report, 2018 B. Self-Care: Better Daily Health for Individuals and Societies. :35.

14. TDU Bengaluru [Internet]. [cited 2023 Jun 27]. Integrative Health Science | Tdu University | Bengaluru. Available from: https://www.tdu.edu.in

15. Savatagi SB, Srinivas PN, Payyappallimana U. Factors Influencing the Emergence of Self-Reliance in Primary Health Care Using Traditional Medicine: A Scoping Review. Indian Journal of Public Health. 2022;66(2).

16. Umberson D, Montez JK. Social Relationships and Health: A Flashpoint for Health Policy. J Health Soc Behav. 2010;51(Suppl):S54–66.

17. Communicating evidence for participatory decision making - JAMA network [Internet]. 2018 [cited 2023 Apr 19]. Available from: https://jamanetwork.com/journals/jama/articlepdf/198765/JRP30032.

18. Kleinman A, Eisenberg L, Good B. Culture, illness, and care: Clinical lessons from Anthropologic and Cross-Cultural Research. FOCUS. 2006;4(1):140–9. doi:10.1176/foc.4.1.140.

19. Farmer J, Nimegeer A. Community participation to design rural primary healthcare services. BMC Health Serv Res. 2014 Dec;14(1):130.

20. Tembo D, Hickey G, Montenegro C, Chandler D, Nelson E, Porter K, et al. Effective engagement and involvement with community stakeholders in the co-production of global health research. BMJ. 2021 Feb 15; n178.

21. Rankoana SA. The use of indigenous knowledge for primary health care among the northern Sotho in the Limpopo Province [Internet]. University of Limpopo (Turfloop Campus); 1970 [cited 2023 Oct 18]. Available from: http://ulspace.ul.ac.za/handle/10386/752.

22. Anwar M, Green JA, Norris P, Bukhari NI. Self-medication, home remedies, and spiritual healing: common responses to everyday symptoms in Pakistan. Health Psychology and Behavioral Medicine. 2015 Jan;3(1):281–95.

23. Ryan RM, Deci EL, editors. Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness [Internet]. Guilford Press; 2017 [cited 2022 Jun 29]. Available from: https://www.google.com/books/edition/Self_Determination_Theory.

24. Sheikh K, Gilson L, Agyepong IA, Hanson K, Ssengooba F, Bennett S. Building the Field of Health Policy and Systems Research: Framing the Questions. PLoS Medicine. 2011 Aug 16;8(8):e1001073.

25. Comprehensive Primary Healthcare. GOI. Operational_Guidelines_for_CPHC [Internet]. [cited 2023 Jun 12]. Available from: https://www.nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Stregthening/Comprehensive_primary_health_care/letter/Operational_Guidelines_For_CPHC.pdf